



Work Order ID 74898

74898

Page 1

October 13, 2011 11:23:20 AM

Item ID: D205-634-041.

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Replacement Skidtube

Start Date: 10/13/11 Start Qty: 1.00

1

Cust Item ID:

Required Date: 10/21/11 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: M.C. J Date: 11/10/13 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2580-041

Rev.E

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041

CHG002

CHG005

*PTD

110

0.00

110

BENDING MACHINE - SKIDTUBES

CNC Bend 1

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio 16

JW

11-11-16

2-Cut tubes as per Dwg. D2580

3- scribe batch# in aft end of tube

mb

11-11-16

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
11.12.14	166	SKIDTUBE IS CHG ODS				CP 11.12.14 CS/1642		

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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Page 2

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Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120		0.00							
120						①			
Skidtubes	Memo	0.00							
Skidtubes	1- Deburr ends and remove bending marks								
	2- Prepare tube for welding as per QSI 004								
130	QC5- Inspect part completeness to step on W/O	0.00							
130									
QC	Memo	0.00							
Quality Control									

{ SMO 11-11-23

DP 11-11-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Page 3

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

140

0.00

140

Skid tubes

0.00

Skid tubes

Memo

1-Weld step D2576 as per Dwg. D2580 and OSI 004.
A/R Aluminum Rod *M118 735*

2-Grind welds on step as per Dwg D2580

3-Weld spacers as per dwg D2580 *N/A*

3- ~~***N/A***~~ Insert *D4202-1* spacer, swage as per QSI002 and trim/ grind flush per QSI002 and dwg. Hold x-bolt with DT9701 Use tube expander 1/2 x17G to start expansion and finish with 1/2 x 18G to achieve dwg dimension.

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64",
adjust stopper not to hit web. Debur

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Debur

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Debur

BE-11-006

SAD 11-12-07

★ PTO

SAD 11-12-07

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
11.12.13	140	Swage spacers per DEC DLS86-E-1				CP 11.12.14 DS/042	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 4

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Required Date: 10/21/11 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* QC Quality Control	QC10- Inspect visual per QSI004- ground welds Memo <i>Sulizlo7</i>	0.00 0.00							
160 *160* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo <i>Sulizlo7</i>	0.00 0.00							<i>check for cracks in D4202-1</i> POSITIVE RECALL EFFECTIVE <u>11/10/14</u> AUTH <u> </u> RELEASED <u>11/12/14</u> DATE <u> </u>
170 *170* HandFinish Hand Finishing	Pressure Wash per QSI005 4.3 Memo	0.00 0.00							<i>NO M-11/12/10</i>

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

W/O:		WORK ORDER CHANGES					
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Page 5

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Stop ***NR2***

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180	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
-----	--	------	--	--	--	--	--	--	--

180

Powdercoat

Powder Coating

Memo

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

3:30
3200 F
4:00

Handwritten signature and date 11/12/12

190	QC3- Inspect Part Finish	0.00							
-----	--------------------------	------	--	--	--	--	--	--	--

190

QC

Quality Control

Memo

0.00
8/12/13

POSITIVE RECALL

EFFECTIVE _____ AUTH _____

RELEASED 8 DATE 11/12/13

W/O:		WORK ORDER CHANGES					
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Page 6

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Run Start ***NR1***

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Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

200

0.00

200

HandFinish

0.00

Hand Finishing

Memo

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates

A/R Sikaflex-291

Sikaflex expire date: 12-1

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive

A/R Sikaflex-291

Sikaflex expire date: 12-1

5-Wing Walk as per Dwg D2580 and QSI 005 4.4

Batch: 1140741 BR 11-12-14

W/O:		WORK ORDER CHANGES					
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October 13, 2011 11:23:20 AM

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Page 7

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Required Date: 10/21/11 Req'd Qty: 1.00

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210 *210* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024	0.00 0.00							
220 *220* Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPPD205-634-041 Location: <u>L73</u> PPP Rev: <u>L73</u>	0.00 0.00							
230 *230* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							

8/12/14

no change

SP 11-12-14

PPP 76547

11/12/14

02/11/21/14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Picklist Print

October 13, 2011 11:23:25 AM

Page 1

Work Order ID: 74898

74898

Parent Item: D205-634-041

D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 10/13/11

Required Date: 10/21/11

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30
KJ IPP Rev P 10.02.19
per PAR09-043 EC verified by:DD
IPP Rev. O 06.02.28 Added paperwork EC
IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM IPP Rev:Q
10.12.01 as per chg003 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D4202-1		Manufactured	No			140	Each	492.0000	20	.20			
---------	--	--------------	----	--	--	-----	------	----------	----	-----	--	--	--

D4202-1

Spacer

**

SAD 11-12-07

Location	Loc Qty	Loc Code
LG002	492	
66929	106	
67129	196	
67308	1	
67430	140	
72639	49	

D2580-1		Manufactured	No			110	Each	1.0000	1	1			
---------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--

D2580-1

205 Skidtube bent detail

**

B76174

Location	Loc Qty	Loc Code
LG	1	
72965	1	

D2576-3		Manufactured	No			140	Each	69.0000	1	1			
---------	--	--------------	----	--	--	-----	------	---------	---	---	--	--	--

D2576-3

Step (maching detail)

**

BE 11-12-06

Location	Loc Qty	Loc Code
LG	69	
66156	19	
70883	50	

W/O:		WORK ORDER CHANGES					
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D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 10/13/11

Required Date: 10/21/11

Start Qty: 1.00

Required Qty: 1.00

D2855 Manufactured No

200

Each

18.0000

1

1

D2855

Cap

**

Bl 11-12-14

Location

Loc Qty

Loc Code

FP007

73347

18

65519

2

65569

16

1

AN3-5A Purchased No

200

Each

874.0000

2

2

AN3-5A

Bolt

**

Bl 11-12-14

Location

Loc Qty

Loc Code

ST350

874

115371

46

117423

528

118626

300

2

AN960JD10L ~~AS1149D0332~~ Purchased No

200

Each

0.0000

2

2

***AN960JD10L ***

Washer

118389

**

2

Bl 11-12-14

ALS7-1032-130 Purchased No

200

Each

1,177.000

50

50

ALS7-1032-130

Insert

**

Bl 11-12-14

Location

Loc Qty

Loc Code

ST281

114530

1000

118966

1000

ST282

177

117717

31

118386

146

50

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 10/13/11

Required Date: 10/21/11

Start Qty: 1.00

Required Qty: 1.00

AN3C4A Purchased No 200 Each 2,067.000 50 50

AN3C4A

BOLT

**

BL 11-12-14

Location

Loc Qty

Loc Code

ST350

2067

117313

2

117688

5

117872

22

118112

16

118451

522

118706

500

118838

1000

AN960C10L *X* NAS1149C0332 *✓* Purchased No

***AN960C10I ***

washer

D3566-13

Manufactured No

200

Each

0.0000

50

50

**

119730

50 - BL 11-12-14

D3566-13

Gasket

**

BL 11-12-14

Location

Loc Qty

Loc Code

FP

29

73322

29

FP014

11

68341

1

72149

10

W/O:		WORK ORDER CHANGES					
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D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 10/13/11

Required Date: 10/21/11

Start Qty: 1.00

Required Qty: 1.00

D3566-5

Manufactured No

200

Each

18.0000

1

1

D3566-5

Gasket

**

BR 11-12-14

Location

Loc Qty

Loc Code

FP002

75069
74387

12

12

FP015

72849

6

6

D3566-1

Manufactured No

200

Each

53.0000

2

2

D3566-1

Gasket

**

BR 11-12-14

Location

Loc Qty

Loc Code

FP002

76941
73303
74518

51

25

26

FP015

68924

2

2

D3564-11

Manufactured No

200

Each

13.0000

1

1

D3564-11

Wearshoe

**

BR 11-10-14

Location

Loc Qty

Loc Code

FP019

74075
73146

11

11

FP020

72207

2

2

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Required Date: 10/21/11

Start Qty: 1.00

Required Qty: 1.00

D3564-13

Manufactured No

200

Each

26.0000

1

1

D3564-13

Wearshoe

**

BR 11-12-14

Location

Loc Qty

Loc Code

FP001

75045

25

72850

7

73323

18

FP017

1

71594

1

D3564-9

Manufactured No

200

Each

24.0000

1

1

D3564-9

Wearshoe

**

BR 11-12-14

Location

Loc Qty

Loc Code

FP

75071

19

73345

19

FP019

5

67590

4

69943

1

D3564-5

Manufactured No

200

Each

20.0000

1

1

D3564-5

Wearshoe

**

BR 11-12-14

Location

Loc Qty

Loc Code

FG

74543

2

34806

2

FP19

18

73330

18

W/O:		WORK ORDER CHANGES					
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Parent Item Name: Replacement Skidtube

Start Date: 10/13/11

Required Date: 10/21/11

Start Qty: 1.00

Required Qty: 1.00

D2594-3 Manufactured No

200 Each 884.0000 16 16

D2594-3

O-Ring, 205 Skidtube

**

BR 11-12-14

Location

Loc Qty

Loc Code

FP004

198

73490

198

FP-A

686

65518

41

66952

347

73490 ✓

298

16

D2594-1 Manufactured No

200 Each 500.0000 16 16

D2594-1

Plug, 205 Skidtube

**

BR 11-12-14

Location

Loc Qty

Loc Code

FP

172

73401

172

FP-A

328

42807

28

67441

7

72127

47

16

W/O:		WORK ORDER CHANGES					
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

LIST OF MATERIALS					DESCRIPTION
ITEM	QTY -041	QTY -045	QTY -047	PART NUMBER	
1	X			D2580-041	SKIOTUBE ASSEMBLY
2		X		D2580-045	SKIOTUBE ASSEMBLY
3			X	D2580-047	SKIOTUBE ASSEMBLY
4	1	1	1	D2500-1-190	EXTRUSION
5			16	D2570	BUSHING
6	1	1	1	D2576-3	STEP
7	20	24	25	D2579	SPACER
8	16	16	8	D2594-1	PLUG
9	16	16	8	D2594-3	O-RING
10	1	1	1	D2596	205 WEB
11	1	1	1	D2855	AFT CAP
12	1	1		D3564-5	WEARSHOE
13	1	1		D3564-9	WEARSHOE
14	1	1		D3564-11	WEARSHOE
15	1	1		D3564-13	WEARSHOE
16	2	2		D3566-1	GASKET
17	1	1		D3566-5	GASKET
18	1	1		D3566-13	GASKET
19			1	D4406-041	WEARPLATE ASSEMBLY
20			1	D4406-043	WEARPLATE ASSEMBLY
21	50	50		ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
22	50	50		AN3C4A	BOLT
23	2	2	2	AN3-5A	BOLT
24			8	AN4-45A	BOLT
25	50	50		NAS1149C0332R	WASHER (AN960C10L)
26	2	2	2	NAS1149D0332J	WASHER (AN960JD10L)
27			8	MS21042-4	NUT (OR MS21042L4)

GENERAL NOTES:

- MATERIAL: N/A
- FINISH: CHEMICAL CONVERSION PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ASSEMBLY (-041/-047) GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
POWDER COAT ASSEMBLY (-045) GREEN SANDEX (REF 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4.
- TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
- UNITS: INCHES UNLESS OTHERWISE NOTED.
- BREAK SHARP EDGES: 0.005 TO 0.010 MAX.
- IDENTIFICATION: NONE
- WEIGHT: D2580-041 = 34.5 lbs
D2580-045 = 34.5 lbs
D2580-047 = 37.7 lbs
- WELDING PER DART QSI 004.
- INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIOTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- USE DART DRILL TEMPLATE DT8217 & DT8937 ONLY FOR D2580-041/-045 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTIONS B-B AND F-F (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND NAS1149C0332R WASHERS WITH SIKAFLEX-241/-291.
- INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES FOR D2580-041/-045 AND 8 PLACES FOR D2580-047)
- IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE WITH THE SPACER AT THIS LOCATION

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2011-08-29

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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. ~~3140~~ M.L.J

74898 10/10/11

E	ADD D2580-047 (ZN C4-7) AND D2580-7 (ZN B3-8); INCLUDED DEO D2580-D-1; REFORMATTED DRAWING TO CURRENT STANDARDS; DT8217 & DT8937 WAS TD2577-205 (ZN C4-1)	RF	11.06.21
D	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/ 9183	PH	07.04.05
C	REDRAWN, INCLUDED DEO 9094/ 9097	CP	98.08.26
B	AS MANUFACTURED	DS	96.12.02
A	NEW ISSUE	DS	96.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	#		
DRAWN	RF		
CHECKED	10		
MFG. APPR.	10		
APPROVED	10		
DE APPR.	10		
DATE	11.06.21		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D2580
REV. E
SHEET 1 OF 8
TITLE 205 SKIOTUBE ASSEMBLY
SCALE NTS

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

44786



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

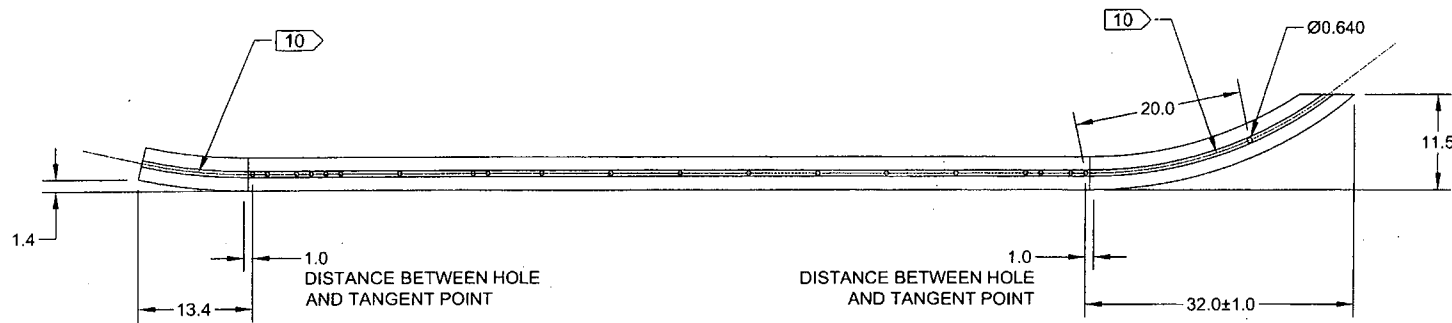
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74898
24788



D2580-1 BENT TUBE
(MAKE FROM D2580-101 TUBE)

RELEASED
2011-08-28

DESIGN	RF	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	10	DRAWING NO.	REV. E
MFG. APPR.	10	D2580	SHEET 3 OF 8
APPROVED	10	TITLE	SCALE
DE APPR.	10	205 SKIDTUBE ASSEMBLY	NTS
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

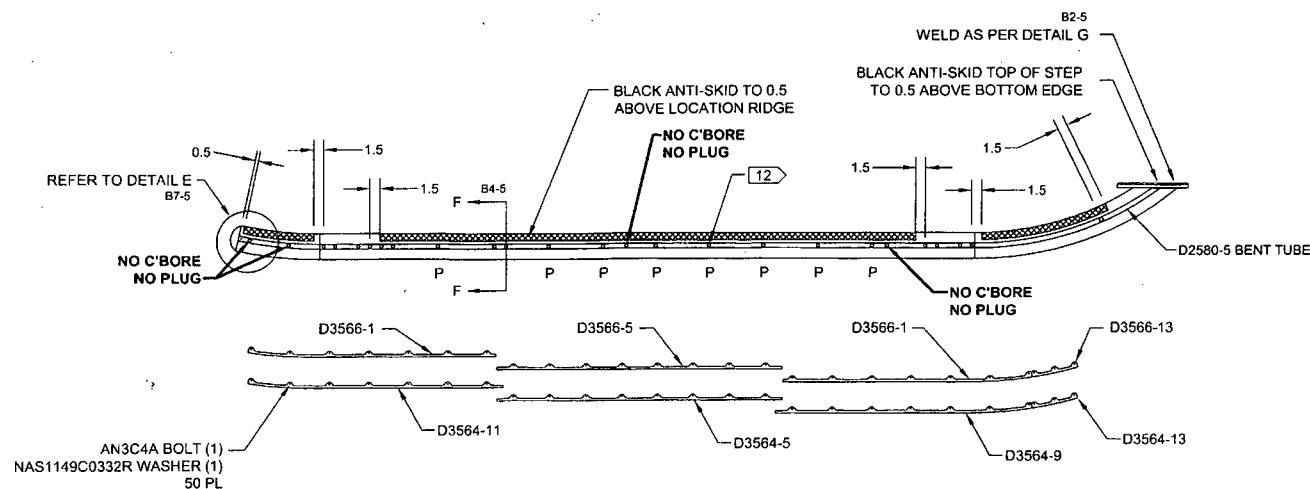
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

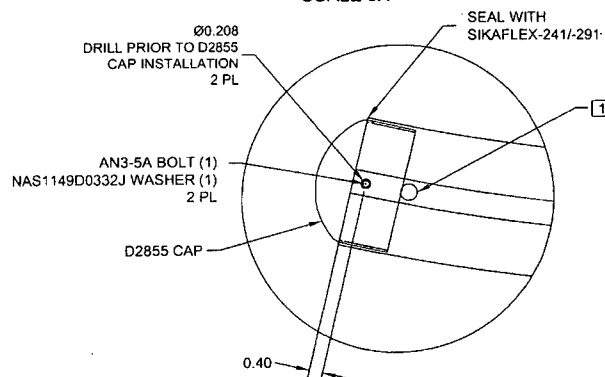
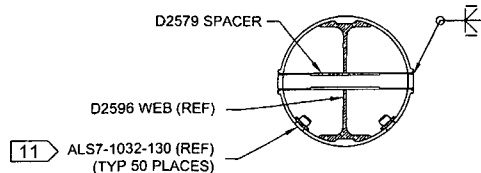
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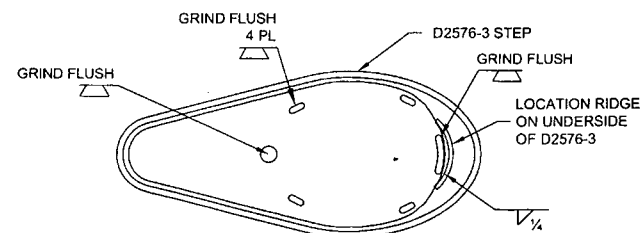


D2580-045 ASSEMBLY DETAIL

DETAIL E
SCALE 5XSECTION F-F
SCALE 5X

AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (24 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

DETAIL G
SCALE 5X

RELEASED
R 2011-08-28
W

DESIGN	#	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	10	DRAWING NO.	REV. E
MFG. APPR.	10	D2580	SHEET 4 OF 8
APPROVED	10	TITLE	SCALE
DE APPR.	10	205 SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

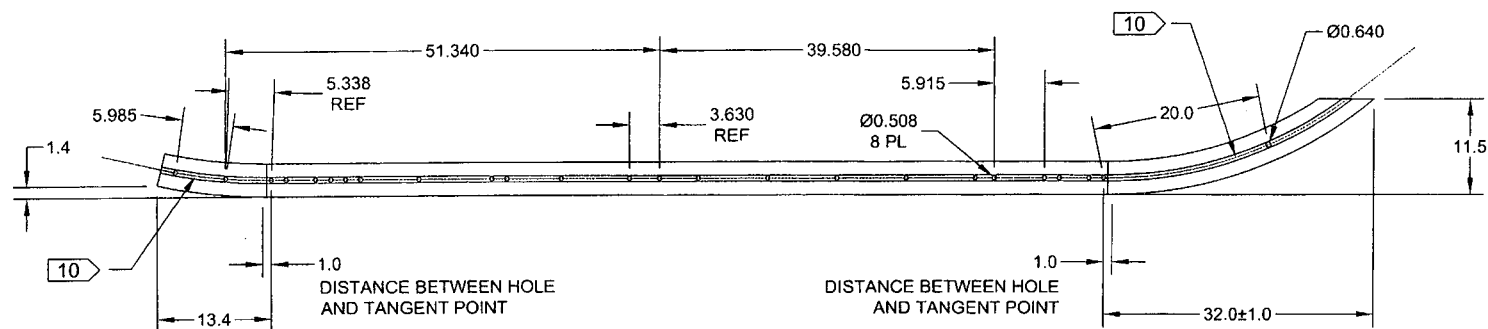
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74898

282802



D2580-5 BENT TUBE
(MAKE FROM D2580-101 TUBE)

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2011-08-29

DESIGN	#	DART AEROSPACE LTD	
DRAWN	RF	HAWKESBURY, ONTARIO, CANADA	
CHECKED	14	DRAWING NO.	REV. E
MFG. APPR.	14	D2580	SHEET 5 OF 8
APPROVED	14	TITLE	SCALE
DE APPR.	14	205 SKIDTUBE ASSEMBLY	NTS
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W/O:		WORK ORDER CHANGES					
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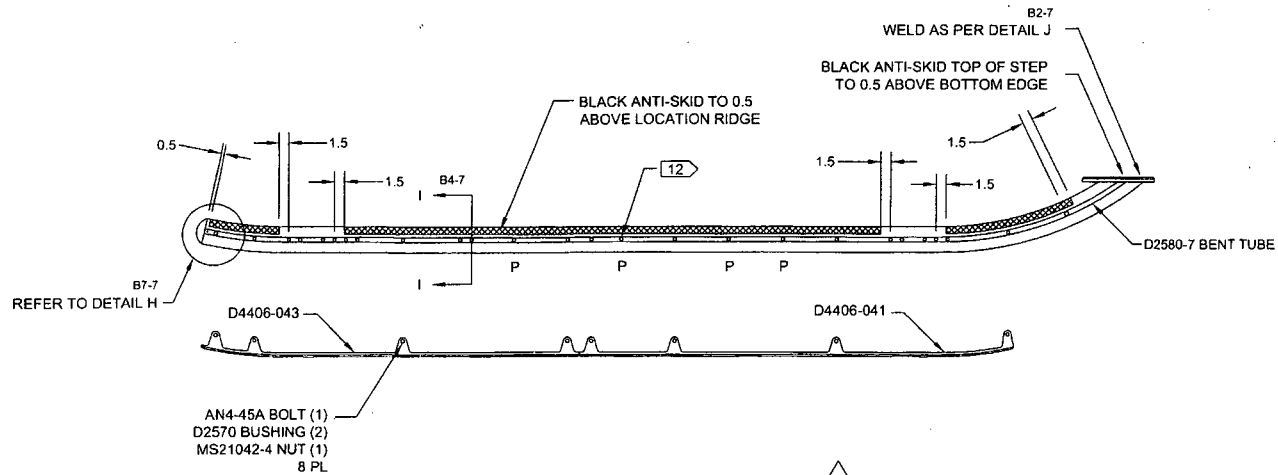
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

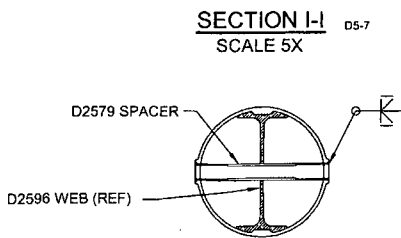
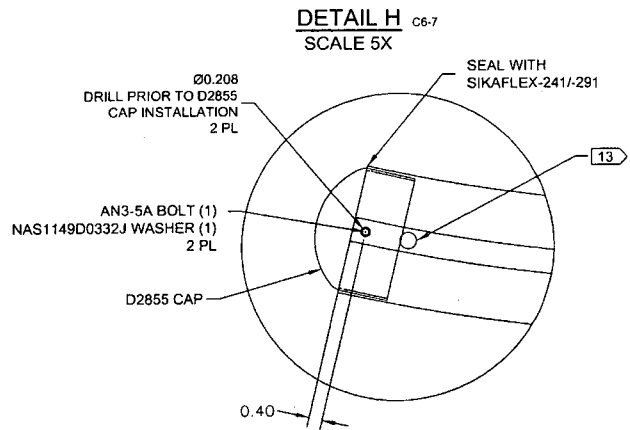
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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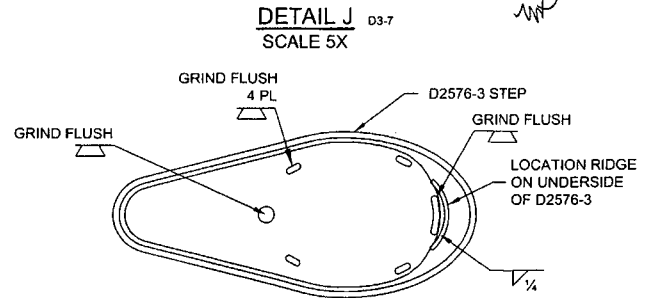
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D2580-047 ASSEMBLY DETAIL E



- AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:
1. CHAMFER HOLE 0.050 X 45°
 2. INSERT D2579 SPACER (25 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP



DESIGN	#	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	10	DRAWING NO.	REV. E
MFG. APPR.	10	D2580	SHEET 6 OF 8
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DE APPR.	10	205 SKIDTUBE ASSEMBLY	NTS
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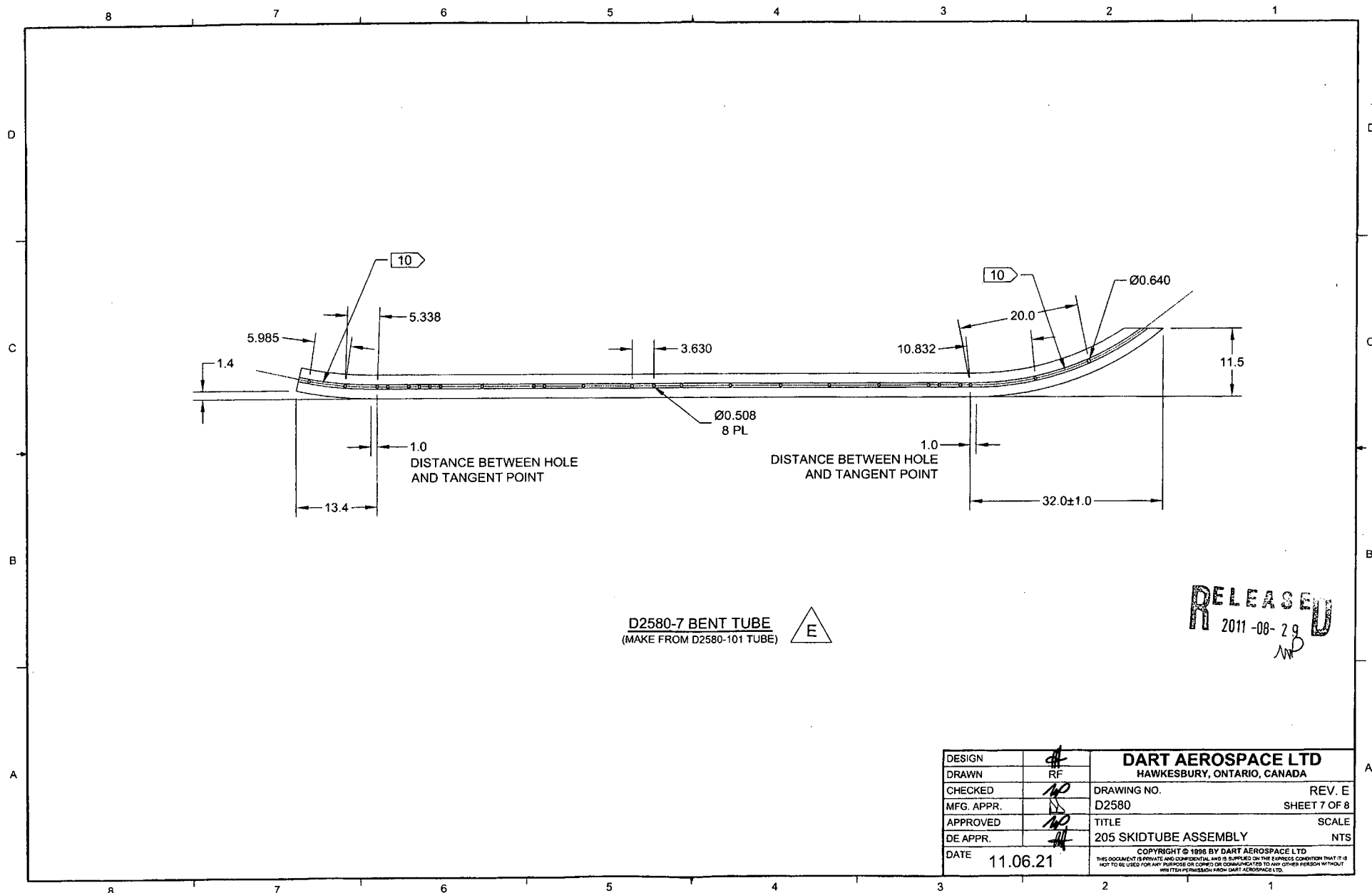
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	AP	DRAWING NO.	REV. E
MFG. APPR.	AP	D2580	SHEET 7 OF 8
APPROVED	AP	TITLE	SCALE
DE APPR.	AP	205 SKIDTUBE ASSEMBLY	NTS
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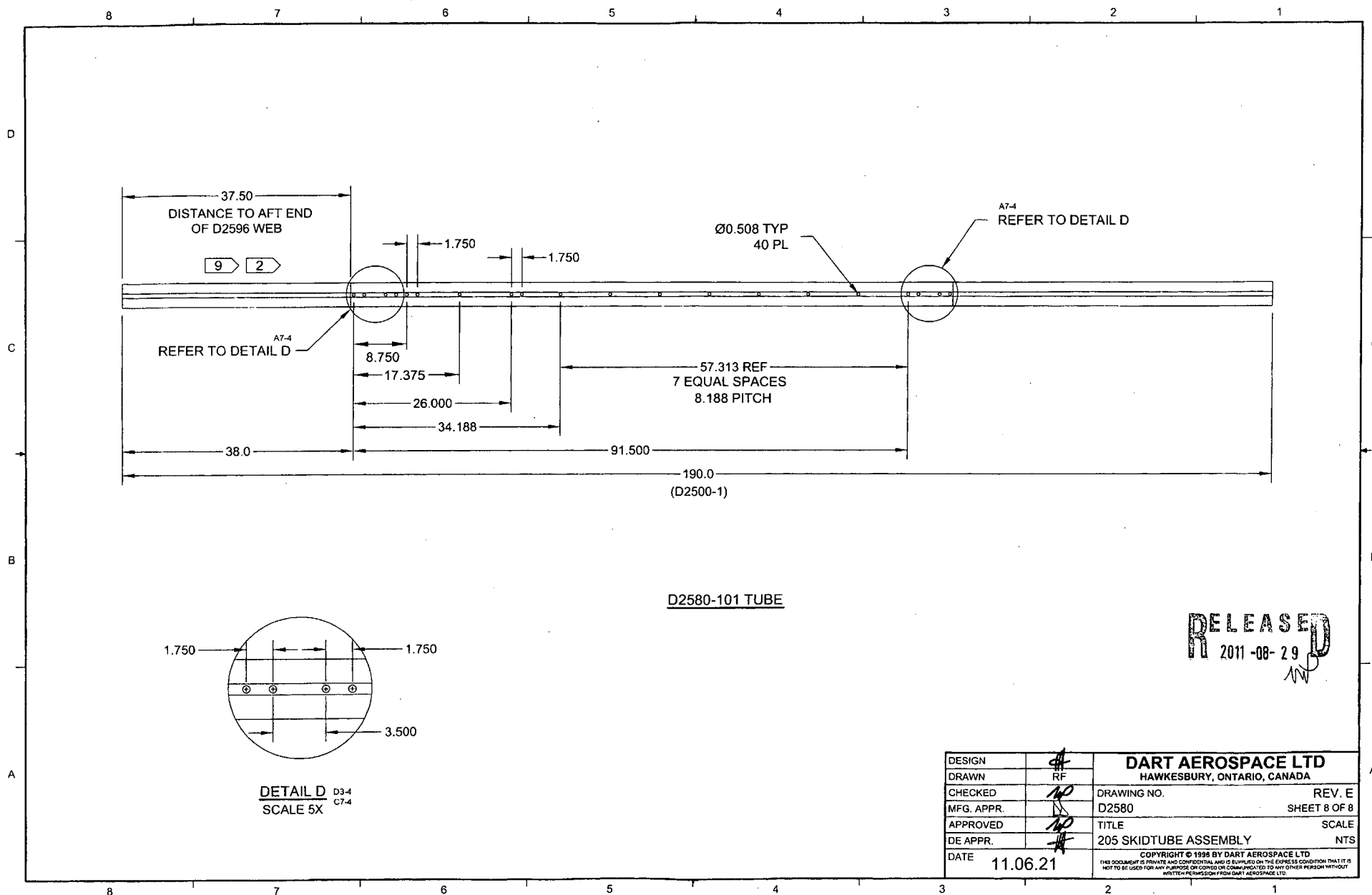
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DRAWING NO. D2580	TITLE 205 SKIDTUBE ASSEMBLY	REV. E	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D2580-E-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>AD</i>	CHECKED <i>ASS</i>	MFG. APPR. <i>EC</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 11.12.13	DATE 11.12.13	DATE 11.12.13	DATE 11.12.13		DATE 11.12.13		